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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,486	08/07/2003	Tomoyuki Ohzeki	FSF-031421	1098

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EXAMINER	
CHEA, THORL	

ART UNIT	PAPER NUMBER
1752	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/635,486	OHZEKI, TOMOYUKI	
	Examiner	Art Unit	
	Thorl Chea	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawahara et al (US Patent No. 6,436,626). See Kawahara et al in column 14-20 which discloses the preformed silver halide emulsion, preparation of sodium salt of fatty acid solution; preparation of dispersion of silver halide and organic silver salt by adding the sodium salt of fatty acid and preformed silver halide emulsion and then added silver nitrate to form "dispersion of silver halide and organic silver salt". The sodium salt of fatty acid in column 14, lines 55-67 contains 60 % of sodium salt of behenic acid. See also silver halide includes silver chloride, silver chlorobromoiodide, silver

chloroiodobromide, silver bromide, silver iodobromide or silver iodide column 5, lines 39-41; and the average size of silver halide grain preferably between 0.02 micron to 0.08 micron (20 nm - 80 nm)

Kawahara et al discloses among the silver halide the silver iodide which encompasses the scope of silver halide containing 100 mo % silver iodide, the average size of silver halide grains having the size overlaps the size of the halide claimed in the present invention and made silver salt of an organic acid are made in the presence of preformed silver halide grains. Therfore, the invention as claimed lacks novelty. Alternatively, the worker of ordinary skill in the art would have selected the silver halide among the silver halide disclosed in Kawahara with an expectation of achieving a material that gives lower fog and high maximum density and inhibited in the variation of density depending on the fluctuation of the developing condition, and thereby provide a material as claimed.

4. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al (US Patent No. 6,436,626) as applied to claims 1-6, 18-20 above, and further in view of either Uytterhoeven et l (US 6,143,488), Siga et al (US 4,332,889), Ohzeki et al (US Patent No. 2003/0194659), Fukui et al (US Patent No. 2003/0207216), or Yoshioka (US Patent No. 2003/0235794). Uytterhoeven et al discloses a use of silver halide having iodide content at least 80 mole % of silver halide to provide post stability of the photothermographic material. Siga disclose in column 6, lines 43-68 disclose the relative amount of the silver iodide with respect to silver bromide to satisfy the sensitivity condition and storage condition. It is disclosed that "from the view point of sensitivity of image forming material, the silver halide is desired to contains, beside silver iodide, at least 2 mole %, based on silver halide component, silver

bromide and/or silver chloride, although the silver halide may include only silver iodide, i.e. 100 mole % of silver iodide. Furthermore, from view point of stability of the raw image forming material, it is desired that silver halide component contains, besides silver iodide, silver bromide than silver chloride. Therefore, the most preferred silver halide component consists of silver iodide and silver bromide. In this case, silver iodide and silver bromide may be provided in either a mixture thereof or mixed crystals thereof. The molar ratio of silver iodide to silver bromide may be preferably 30/70 to 98/2, more preferably 50/50 to 95/5." . The use of silver halide having iodide content from 40 mole % t0 100 mole % have been known Ohzeki et al (US Patent No. 2003/0194659), Fukui et al (US Patent No. 2003/0207216), or Yoshioka (US Patent No. 2003/0235794) in the abstract. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to provide a select silver halide containing silver content taught in either Uytterhoeven et al, Siga et al, Ohzeki et al, Fukui et al or Yoshioka accordingly the desired results such as post-image stability or the sensitivity of the image, and thereby provide a material as claimed.

5. Claims 3-6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al (US Patent No. 6,436,626) as applied to claims 1-2, 18-20 above, and further in view of either Ikienoue et al (US Patent No. 4, 152,160) or Tsuzuki (US Patent 5,677,121). Ikienoue et al discloses the use of silver behenate of 50 mol % or more to provide a thermally developable material with an improvement of freshness retention property without causing any adverse increase in both light discoloration and dark discoloration. Tsuzuki discloses a use of silver salt of an organic acid containing silver behenic from 35 to 90 mole % to provide heat-developable material with excellent storability. It would have been obvious to the worker of ordinary skill in

the art to use the silver behenate within having percentage within the scope taught in either Ikienoue et al or Tsuzuki in the material of Kawahara et al (US Patent No. 6,436,626) for same reason therein and thereby provide a material as claimed.

6. Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al (US Patent No. 6,436,626) as applied to claims 1-2, 18-20 above, and further in view of Arai et al (US Patent No. 6,090,538). Arai discloses the polyhalogenate compound as antifoggant in columns 43-44; the phosphoryl compound in column 10, lines 15-35; the hydrazine compound in columns 9-29; the phenol reducing agent in column 2, compound (A); the binder such as poly(vinyl butyral) in column 42, lines 1-14. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use known additives for photothermographic material taught in Arai et al in the material of Kawahara et al (US Patent No. 6,436,626) with a reasonable expectation of achieving of improving the fogging property and photographic speed, and thereby provide an invention as claimed.

7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al (US Patent No. 6,436,626) as applied to claims 1-2, 18-20 above, and further in view of either Goto et al (US Patent No. 6,787,298) or Farid et al (.US Patent No. 5,747,235).. See compound of Goto et al in columns 2-4, and Farid in the abstract and columns 16-18. The compound having property as claimed and useful as sensitizer for silver halide emulsion. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the sensitizer taught in Goto et al or Farid et al for same reason, and thereby provide a material as claimed.

8. Claim 21 is rejected under 35 U.S.C. 102(e) as anticipated by Yoshioka (US2003/0235794A1).

See page 40, claim 1; page 50, claims 17-20; page 27, [0180] to [0182]; and page 30, [0025]. Yoshioka discloses the material and the process of preparing the non-photosensitive organic silver salt as claimed. Therefore, the claimed invention lacks novelty.

9. Claim 21 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Toya et al (US Patent No. 5,998,127). See silver iodide and silver iodobromide having silver iodide from 0.1 to 40 mole % in column 3, lines 46-55; silver halide grains having grain size from 10 nm to 120 nm in column 3, lines 15-20; the amount for silver halide of 0.01 to 0.5 mol per mol of organic silver salt, and the method of preparing an organic silver salt by adding already prepared photosensitive silver halide at any time during the preparation of an organic silver salt in column 5, lines 34-36 and 44-46. The silver iodide, the silver bromide having 40 mole % iodide, the silver halide of grain size of 10 nm to 120 nm and the amount of 0.5 mole/mole of organic silver salt overlap the silver halide, the size and the amount thereof claimed in the present invention. Therefore, the invention lacks novelty. Alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver iodide or silver bromoiodide having the size and the amount taught therein with an expectation of achieving a highly useful material.

Response to Arguments

10. Applicant's arguments filed August 31, 2005 have been fully considered but they are not persuasive for the reason set forth in the rejection above.

The applicants argue that "the present inventor found that that the coating amount of silver halide having high iodide content which is preferably used in the invention was large, the development was markedly suppressed leading to lower sensitization, accompanied by deterioration of density stability depending on the development time, which is not preferred. On the contrary, it was found that when the amount to be added is limited, sufficient development property could be achieved even though silver iodide was used.". The advantages obtained by using a silver halide having high iodide content and a specific average particle size in a reduced amount are clarified in the enclosed Declaration. Kawahara et al does not teach or suggest such advantage obtained by coating amount of the silver halide. In addition, the silver halide used in Examples of Kawahara has a silver iodide content of as low as 2 mole %, and average size of 68 nm.

The argument is not persuasive. Kawahara et al discloses the use of silver halide including silver iodide which is silver halide of 100 mole % silver iodide in column 5, line 42; the size of silver halide grains from 10 nm to 100 mn, and the silver salt of an organic prepared same process as claimed. The content of silver iodide and the size of silver halide encompass the scope of silver halide and the size thereof claimed in the present claimed invention. Moreover, it would have been obvious to worker of ordinary skill in the art at the time the invention was made to use silver iodide having size suggested therein to provide an invention as claimed. The applicants may argue with respect to the amount of silver halide with respect to silver salt of an organic acid, but such as amount is not incorporated in claim 1. Therefore, the invention as claimed is still read on the teaching of Kawahara et al, and the Declaration fails to overcome the rejection under 35 USC 102(b). "(E)vidence of secondary considerations, such as unexpected results or

commercial success, is irrelevant to 35 U.S.C 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973).

Supposedly, the amount of silver halide within the amount of 0.5 to 15 mole % is incorporated in claim 1, such amount have been known in the art such as provided in the rejections in paragraphs 8-9 above.

The Declaration is also not commensurate with the scope of the claimed invention. The claimed invention is directed to the amount of silver halide having iodide from 40 to 100 mole % , size of the grains is from 5 nm to 50 nm and the amount thereof from 0.5 to 15 mole % per mole of the organic silver salt. The Declaration shows the silver halide with silver iodide content of 80 and 100 mole. These two amounts do not represent the whole range of silver iodide claimed in the present invention which is 40 mole % the lower limit and 100 mole % the upper limit. Moreover, the samples shown in the Declaration is prepared according in sample 12 prepared in Example 1 of Kawahara which related contains silver behenate and the bisphenols reducing agent which the preferred silver salt of an organic acid and preferred reducing agent, while the scope of silver salt of the organic acid and the reducing agent encompass the scope other that the preferred ones. Accordingly, the invention as claimed is either anticipated by or found prima facie obvious over the applied prior art of record such as shown in the above rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tch
02-08-2006

Thorl Chea
Primary Examiner
Art Unit 1752